NOTES ON A SISORID CATFISH FROM THE BLACK SEA DRAINAGE OF TURKEY

by

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RÉSUMÉ. – L'aire de répartition des Sisoridae du genre *Glyptothorax* s'étend du bassin Tigre-Euphrate jusqu'à la mer Noire, à la suite de la capture d'un individu dans le Yesil Irmak à Tasova en Turquie. Cet individu est différent des autres spécimens de *Glyptothorax* du Moyen-Orient par la combinaison de ses caractères. Ceci nous amène donc à remettre en question les caractères utilisés précédemment pour définir l'espèce.

SUMMARY. – The range of the sisorid catfish genus *Glyptothorax* is extended from the Tigris-Euphrates basin to the Black Sea basin by the capture of a single specimen from the Yesil Irmak at Tasova in Turkey. This individual is unlike other Middle East *Glyptothorax* specimens in its combination of characters and calls into question the utility of characters used previously to define the species.

Key-words : Glyptothorax, Pisces, Sisoridae, systematics, Turkey.

The Sisoridae are found principally in the Oriental region (Jayaram, 1981) but are also known from the Tigris-Euphrates basin in Turkey, Syria, Iraq and Iran. The Middle East members of the Sisoridae are poorly known and Berra (1981), for example, did not include this distribution on his family map (Coad, 1983). There are five nominal species restricted to the Tigris-Euphrates basin (Coad, 1981, Kuru, 1971). These are *Glyptothorax armeniacus* (Berg, 1918), *G. cous* (Linnaeus, 1766), *G. kurdistanicus* (Berg, 1931), *G. silviae* Coad, 1981, and *G. steindachneri* (Pietschmann, 1913).

One of us (GBD) recently collected a single specimen of a sisorid catfish on 11 July 1981 from the Yesil Irmak at Tasova (40°46'N, 36°20'E) in northern Anatolia, Turkey. This river drains to the Black Sea and the specimen significantly extends the distribution of the Sisoridae in the Middle East. A description of the specimen is given below because it exhibits certain characters which call into question previous interpretations of the Tigris-Euphrates sisorid species. Methods for counts and measurements follow Coad (1981).

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Description

The general appearance of the specimen can be seen in Figure 1. It is an adult female 136.6 mm total length carrying eggs up to 1.6 mm in diameter. Dorsal fin rays II,6 ; anal fin rays II,6 ; pectoral fin rays I,8 ; pelvic fin rays I,5 ; branched caudal fin rays 15 ; total gill rakers on first arch 7 ; pectoral spine serrations about 13 but obscured by flesh of the fin ; total vertebrae 36.

Head depressed, body ovate in vertical cross-section, caudal peduncle laterally compressed. Dorsal profile rises gently from snout to dorsal origin and is then horizontal to the tail. Head length (HL) in total length 4.6, HL in standard length (SL) 3.9, head depth in SL 6.0, body depth in SL 4.7, head width in HL 1.3, head depth in HL 1.5, gape in HL 2.6, maxillary barbel length in HL 1.6, interorbital width in HL 4.4, snout length in HL 2.0, eye small, in HL 10.3, in snout length 5.2, in interorbital width 2.3, length of dorsal fin base in length of longest branched ray 1.1, length of dorsal fin base in SL 7.6, length of dorsal fin spine in HL 1.7, pectoral fin length in SL 4.4, pectoral fin length in distance between pectoral fin origin and pelvic fin origin 1.6, pelvic fin length in distance between pelvic fin origin and anal fin origin 1.2, distance from anus to anal fin origin in distance from pelvic fin origin to anal fin origin 5.3, length of adipose fin base in HL 1.7, length of adipose fin base in length of dorsal fin base 0.9, length of adipose fin base in distance between dorsal fin insertion and adipose fin origin 1.7, distance between dorsal fin origin and adipose fin origin in predorsal length 0,9, predorsal length in SL 2.7, caudal peduncle depth as a % of caudal peduncle length 60, caudal peduncle depth in caudal peduncle length 1.7, caudal peduncle length in SL 5.3, caudal peduncle length in HL 1.4, caudal peduncle depth in HL 2.3.

The thoracic adhesive apparatus is longer than wide, bears pinnate lateral branches, and has a wide and long central depression. The head and body dorsally lack striated tubercles. The skin on the flanks is lightly rugose. Anterior to the thoracic adhesive apparatus, the ventral head surface is strongly papillose, fading laterally. The lower lip is only weakly papillose while the upper lip is much more strongly papillose. The supraoccipital crest does not touch the basal bone of the dorsal fin. The dorsal spine is smooth and moderately strong. The pectoral spine is much stronger and bears a series of retrose serrae on its internal edge. The caudal fin is very shallowly forked and the lobes are equal in length. The origin of the adipose fin is slighly anterior to the origin of the anal fin. The lateral line is complete but difficult to trace anteriorly. The gill openings are wide and extend ventrally from above the pectoral fins almost meeting at the isthmus. There are two rounded, rectangular maxillary tooth plates. The lower jaw bears two tooth plates, separated by a small space, and tapering postero-laterally. These tooth plates all bear villiform teeth. The nasal barbel does not quite reach to the anterior margin of the eye. The maxillary barbel extends posteriorly to just beyond the origin of the pectoral fin. The outer lower jaw barbel almost reaches the pectoral fin origin while the inner lower jaw barbel is about half this length.

Colour and pigmentation in 70 % ethanol is as follows. The body is dark-grey with scattered darker spots, about eye size or a little larger, on the flanks and back.

The belly anterior to the anal fin is cream to grey and the adhesive apparatus and lips are also pale. The base of the caudal fin has a wide black bar separated from a second, distal bar by a light bar. The postero-dorsal and postero-ventral corners of the caudal lobes are light with some very narrow black edging. The extreme posterior margin of the caudal fin is hyaline. The dorsal, anal, pelvic and pectoral fins are dark at the base with a lighter bar in mid-fin separated by a dark bar from a lighter fin edge. The adipose fin is dark and mottled with darker spots. A light patch is found on the back at the dorsal fin origin.

Discussion

The principal characters used in identifying *Glyptothorax* species from the Middle East are : number of branched anal fin rays, width versus length of the thoracic adhesive apparatus, presence or absence of pinnate lateral branches on the adhesive apparatus, length of the caudal peduncle, length of the pectoral fin, head length, and presence or absence of tubercles on the head and body dorsally (Berg, 1918 ; 1931 ; Coad, 1981). The Yesil Irmak specimen agrees with *G. armeniacus* in all but the last two characters. The head is long, a character found in species other than *G. armeniacus*, and the absence of tubercles is a character unique to *G. silviae* in the Middle East *Glyptothorax*. One of us (BWC) has searched museums for additional material of Middle East *Glyptothorax* but this genus is poorly represented in collections. Available specimens vary greatly in size (e. g. 47.3 - 346.6 mm SL within one species) and are from widely scattered localities. Preliminary studies by one of us (BWC) indicate that several characters previously thought to be important in distinguishing and defining Middle East *Glyptothorax* show a range of variation which reduces their utility and calls into question the recognition of five distinct species. The Yesil Irmak specimen confirms this supposition and must be assigned to *G. armeniacus* until more material becomes available, variation can be more accurately assessed, and the validity of the five species determined.

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